Introduction:
Transfusion of packed red cells (PRCs) is an important treatment option for patients requiring intensive care but, like all treatments, it is not without risk. These patients, although may be more sensitive to anaemia, are also at increased risk of transfusion-related complications. We conducted an audit of blood prescribing and administering practices in our intensive care unit.

Methods:
Audit proformas were placed in blood prescribing forms for a 1-month period. All transfusions of PRCs were logged over this time, and transfusion triggers, post-transfusion Haemoglobin (Hb) and whether Hb was checked between units was recorded, in addition to other supplementary information.

Results:
Over a 1-month period, 25 transfusion events were recorded, with an average age of the transfused patients of 60 years old (range 35 - 87 years). 76% of transfusion events were for low Hb, 8% for bleeding and in 16% of cases the indication was not documented. For patients transfused for a low Hb, the mean transfusion trigger was 75 g/L (range: 66 g/L – 86 g/L). Only 12% had a transfusion trigger of 70g/L or less, and a further 12% who were transfused for a low Hb had a Hb of 80g/L or more. 36% of transfusion events involved transfusing 2 or more units and, in only 22% of these cases the Hb was checked between units. Excluding the two bleeding patients, the mean increase in Hb following a single unit transfusion was 11.4 g/L (range 2 g/L – 18 g/L), whilst in patients transfused two units, the average increase in Hb was 10 g/L per unit transfused (range 7 g/L – 14.5 g/L), suggesting single unit transfusions may have greater Hb yields.

Conclusion:
Our audit demonstrated variability in transfusion triggers and progress needed with administering practices when transfusing multiple units of blood in the non-bleeding patient. We have since implemented measures to meet guidelines in both prescribing PRCs with restrictive triggers and in the administration and assessment of Hb between units, and will be re-auditing.